

**Bidding Specifications—TR Series (Preliminary) (cont.)****Bidding Specifications**

The full-/part-circle sprinklers shall be a gear-driven rotary type. The sprinkler shall be capable of covering \_\_\_\_ feet radius at \_\_\_\_ pounds per square inch pressure with a discharge rate of \_\_\_\_ gallons per minute. Water distribution shall be via a nozzle mounted in the riser. All eight (8) nozzles shall be interchangeable.

The body and cap of the sprinkler shall be injection molded from ABS, a non-corrosive, impact-resistant, UV-resistant, heavy-duty plastic material. The sprinkler shall have a plastic filter screen sized to prevent entry of foreign material to the nozzle. All parts shall be removable through the top of the sprinkler case.

The sprinkler shall have a single-piece riser/body seal that regulates flushing during pop-up and retraction to clear any debris from around the riser and a stainless-steel spring to ensure positive retraction. The seal shall be a single piece injection molded from polyurethane.

Arc patterns may be set between 30° and 360°. Once set to full circle, the sprinkler will operate continuously in the same direction.

The sprinkler shall have a color-coded nozzle tree with nozzles ranging from:

TR50/TR50XT—1 to 9 GPM (4–34 LPM)  
TR70XT—7–27 GPM (28–41 LPM).

The sprinkler shall have an adjustable TruJectory™ feature (XT models only), allowing the trajectory to be set anywhere between 5° (for low angle) to 25° (for normal operation).

The sprinkler shall have an X-Flow™ device (XT models only), allowing the installer to turn off the flow of a nozzle, while other sprinklers in the system are in operation.

The sprinkler shall have a radius adjustment screw, allowing up to 25% reduction in radius. This operates independently of TruJectory, which also reduces radius.

The sprinkler shall have an over-molded wiper seal for greater debris resistance when burying the sprinkler  $\frac{1}{2}$ " (13mm) below grade.

Rotation shall be accomplished by a water-lubricated, cluster gear-drive assembly driven by a variable stator that maintains consistent speed of rotation through all nozzle flows. The variable stator shall require no adjustment when changing nozzles or arc discs.

All adjustments made to the TR Series rotors are done from the top of the sprinkler using the black arc adjustment band on the riser.

A lavender effluent water use cap shall be available for non-potable water applications.

A  $\frac{3}{4}$ " (20mm) NPT plug shall be provided with all side inlet models to plug the unused inlet.

**High-Pop**

The sprinkler shall be of pop-up design with an overall height of 17" (425mm), a body diameter of  $2\frac{3}{8}$ " (60mm) and a pop-up stroke of 12" (300mm). The sprinkler shall be capable of installation  $\frac{1}{2}$ " (13mm) below-grade level and shall have a  $\frac{3}{4}$ " (20mm) NPT female inlet.

A check valve capable of holding back 8' (2.4m) of elevation change shall be standard. The check valve shall be reversible, if a check valve is not required.

**Lawn Pop-Up**

The sprinkler shall be of pop-up design with an overall height of  $7\frac{5}{8}$ " (193mm), a body diameter of  $2\frac{3}{8}$ " (60mm) and a pop-up stroke of 5" (127mm). The sprinkler shall be capable of installation  $\frac{1}{2}$ " (13mm) below-grade level and shall have a  $\frac{3}{4}$ " (20mm) NPT female inlet. A check valve capable of holding back 8' (2.4m) of elevation change shall be standard. The check valve shall be reversible, if a check valve is not required.

**Shrub**

The sprinkler shall be of shrub design with an overall height of 6" (150mm) and a base diameter of  $2\frac{3}{8}$ " (60mm). The sprinkler shall be capable of mounting above grade and shall have a  $\frac{3}{4}$ – $\frac{1}{2}$ " (20mm–13mm) NPT female inlet. A check valve capable of holding back 8' (2.4m) of elevation change shall be standard. The check valve shall be reversible, if a check valve is not required.

The sprinkler shall be developed and manufactured by an ISO 9001-certified facility. The sprinkler shall be a model number \_\_\_\_\_ and shall be manufactured by The Toro Company, Irrigation Division, Riverside, California, U.S.A.

**Recommended Installation Instructions**

For recommended installation instructions refer to Toro form numbers:

373-0289—TR70XT Series

373-0290—TR50 Series

373-0291—TR50XT Series